

CHEM 2370.002: Organic Chemistry

Spring 2021, University of North Texas, Denton
Lecture: Mon, Wed & Fri; 9.00 a.m. – 9.50 a.m. (Remote; ZOOM)
Recitation: Wed 3.00 p.m. – 3.50 p.m. (Remote; ZOOM)
(Jan 11, 2020 – Apr 30, 2020)

Instructor

Dr. Sri S. Subramanium
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Phone: (918) 200-5933 or (940) 565-2713 (Chemistry Department office)
Office Hours: Mon 4.00 p.m. – 5.00 p.m. (ZOOM)
Fri 4.00 p.m. – 5.00 p.m. (ZOOM)
Other times: by appointment made through email

Course Objectives: Learn the principal concepts related to:

- ❖ The correlation between properties of functional groups and molecules and intermolecular forces
- ❖ The structures, properties, and nomenclature of organic molecules. How to identify, classify, and name the three-dimensional arrangement of atoms and molecules
- ❖ The step-by-step processes of a chemical reaction, reaction mechanism. How to plan the synthesis of any organic molecule.
- ❖ Tools for the identification of functional groups and for the determination of connections between the atoms in molecules

Course content:

The CHEM 2370.002 is the first of introductory undergraduate organic chemistry curriculum at UNT. The course will cover material from chapter 1 – 11 from the textbook. The focus of the study will be on learning the structure, nomenclature, occurrence and uses of main classes of organic compounds; functional groups and their interconversion; character of chemical bonding; stereochemistry; structure and reactivity; acid/base reactions, resonance, inductive and steric effects; reaction mechanisms.

TextbookRequired:

Organic Chemistry”, 12th Ed. by Solomons/Fryhle (Wiley). The course will cover topics presented in Ch. 1-11.

Optional:

- 1) Study Guide and Solutions Manual for Organic Chemistry, 12th Ed., Solomons/Fryhle (Wiley)
- 2) A molecular modeling kit for organic chemistry

Lecture Notes

The lecture notes will be posted on the course's CANVAS Learn site prior to the lectures. You are strongly encouraged to print out the lecture notes, read them before class and bring them to the class.

Class Review and Exam Review Questions

After each class, review questions covering the topic discussed in the class will be posted on CANVAS. You are strongly encouraged to do the problems before coming to next class. One week before the exam, an exam review will be posted on CANVAS. Again, you are strongly encouraged to do the problems and get the help from the professor or super TA if needed.

Homework

Sapling Learning will be used for homework assignment. Assignments and due dates will be announced through email and/or will be posted at the course CANVAS site.

Follow the link <http://bit.ly/saplinginstructions> to create your sapling account for this course.

Other homework will be given as a short answer questions, and students need to submit as an attachment in CANVAS

Problems from the textbook will be assigned but will not be graded. You are strongly encouraged to do the problems to get good marks on exams.

Announcements

Announcements will be given during the class and/or posted at the course CANVAS site and/or distributed by e-mail.

Communicating with your instructor

It is best to reach me through email with any concerns or questions. Response to email is usually within 24 hours on weekdays and by the next business day on weekends.

Class Attendance

Regular attendance at lectures and recitations is required for this course. Attendance will be taken during the class. It would be difficult to catch up if you miss one or more lectures. Recitation session is very important for the learning of organic chemistry, and to help you refine your study skills to tackle this course. It is very important to attend recitation session for this course.

Super Teaching Assistant

The super TAs for this course is Mr. Spenser Washburn. Super TA will also serve as substitutes for Dr. Subramaniam, when Dr. Subramaniam is at conferences or other business trips/meetings.

Mr. Spenser Washburn

email: SpenserWashburn@my.unt.edu

Office hours: Monday and Wednesday 10.00 am – 11.00 am.

Additional Support

Additional Support is available through the Chemistry Resource Center and UNT Student Learning Center.

LockDown Browser

Exams and quizzes must be completed online. LockDown Browser with a webcam is required to take the exams and quizzes. LockDown Browser is like any other browser, the only difference is that LockDown Browser will not let you open additional pages while you are working in Canvas. Please notice that LockDown Browser is not available for Chromebook. Installation information will be uploaded as separate document into CANVAS.

Exams

Three exams and a final exam will be given for the course. Each exam will consist of multiple-choice questions and will be closed book. The exam will be administered online on CANVAS (more details will be provided in an announcement) during the time window given in the syllabus.

Exam 1: Wed, Feb. 03rd, 3:00–3:50 p.m., online

Exam 2: Wed, Mar. 03rd, 3:00–3:50 p.m., online

Exam 3: Wed, Mar. 31st, 3:00–3:50 p.m., online

Final Exam: Wed, Apr 28th, 8.00-10.00 a.m., @ online

Note: Exams 1–3 will emphasize the most recently covered materials. Final Exam will cover Chapter 1-11 in the textbook.

You will be allowed to use the modeling kit while taking exams.

- *Exams, 1-3, are 50 minutes in length (20-25 questions) and final exam is 2 hours in length (50-60 questions).*
- *Be prepared for multiple choice or short answer type questions. Some questions may have different point values.*
- *No new exams will be handed out once the exam has been turned in and the student has left the room.*
- *No one is permitted to leave the room and return during exams.*
- *Cell phones or electronic devices are not permitted **during exams**.*
- *Examiners reserves the right to move you to a different seat during the exam.*

- *Cheating will result in a zero. Any talking, notes or textbook, saved equations on calculators, cheat sheets, showing answer to another student or looking at another student answer sheet etc. will result in an automatic F for all students involved.*
- *There is no talking or asking questions during exams. Hold all questions until exam has concluded.*

Quizzes

Unannounced in class quizzes (~ 5 in total) will be given during lecture/recitation periods as an extra credit (~50 points total). No make-up quizzes will be allowed. Therefore, it's up to the individual to attend the lectures regularly to gather these quiz points.

Grading

Composition of grades:

Exam 1: 100 points

Exam 2: 100 points

Exam 3: 100 points

Final: 200 points

Sapling homework: 100 points

Other homework: 50 points

Total points: 650 points

Extra credits: 50 points (5 extra quizzes)

Letter grades: A \geq 90% (585 points), B \geq 80% (520 points), C \geq 70% (455 points), D \geq 60% (390 points), F < 60% (lower than 390 points).

The grade curving will be used if necessary.

Note: Students must report grading errors within seven (7) days after the return of the exam.

Grades of (exams, homework, quizzes) will be posted after all students complete the assignment.

Make-Up Exam

If you must miss an exam due to a University-approved absence, please see the instructor to discuss the needed accommodations. A make-up exam will only be allowed in cases of illness and university approved absence. The instructor must be notified in written by the student prior to the regularly scheduled exam. Failure to do so may result in a grade of zero for the missed exam. The make-up exams will be scheduled for a day/time following the regularly scheduled exams and may have a different format from the original exam. Emergency situations will be handled on an individual basis.

Academic Integrity Standards and Consequences.

According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

Academic dishonesty is not acceptable to UNT. Students caught cheating will receive a "0" for that assignment or exam. In addition, the incident will be reported to the Dean of Students, who may impose further penalty. Academic misconduct includes the following:

Using another person as a substitute in taking an examination

Cheating during an examination (This includes talking to another person during an examination or looking at someone else's answers)

Having any notes or textbooks in view during an exam

Providing false excuses to delay taking an examination

Having another individual provide answers to submitted problem sets

ADA Accommodation Statement.

UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the ODA website at disability.unt.edu.

The Chemistry Department believes in reasonably accommodating individuals with disabilities and complies with the university policy established under section 504 of the *Rehabilitation Act of 1973* and the *Americans with Disabilities Act (1990)* to provide for equal access and opportunity. Please communicate with me as to your specific needs so that appropriate arrangements can be made through the department and/or the office of Disability Accommodation (ODA, Room 318A, Union, 565-4323).

Emergency Notification & Procedures.

UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to Blackboard for contingency plans for covering course materials.

Table 01: Important Dates for Spring Session

January 11, 2021	First class day
January 15, 2021	Last day for change of schedule other than a drop. (Last day to add a class.)
January 18, 2021	MLK Day (university closed)
February 19, 2021	Last day for change in pass/no pass status.
April 2, 2021	No classes
April 2, 2021	Last day to drop a course.
April 2, 2021	Last day to withdraw from the semester. Process must be completed by 5 p.m. in the Dean of Students Office. Grades of W are assigned.
April 3, 2021	Beginning this date a student who qualifies may request a grade of I, incomplete. (See "Grading system" in the Academics section of this catalog.)
April 21-22, 2021	Pre-finals days
April 22, 2021	Last class day
April 23, 2021	Reading day (no classes)
April 24-30, 2021	Final examinations
May 6-9, 2021	Graduation ceremonies

Table 02: Tentative Schedule of Topics

Week	Date/s	Lecture (Chapter/s)	Notes
01	Jan 11	01	Create account with sapling learning and training.
	Jan 13	01	<i>Start of SHW Ch. 01</i>
	Jan 13 (R)	01	<i>Start of OHW 01</i>
	Jan 15	01	
02	Jan 18	No class, MLK Day (university closed)	
	Jan 20	01	<i>Ch. 01 problem discussion during recitation</i>
	Jan 20 (R)	01	
	Jan 22	01	
03	Jan 25	02	<i>Start of SHW Ch. 02</i>
	Jan 27	02	<i>SHW Ch. 01 due</i>
	Jan 27 (R)	01& 02	<i>Ch. 01 & 02 problem discussion during recitation</i>
	Jan 29	02	
04	Feb 01	03	<i>Start of SHW Ch. 03</i>
	Feb 03	03	<i>OHW 01 due</i>
	Feb 03 (R)	Exam 01	<i>Exam 01 (Chapter 1 & 2) during recitation</i>
	Feb 05	03	<i>SHW Ch. 02 due</i>
05	Feb 08	03	<i>Start of OHW 02</i>
	Feb 10	04	<i>Start of SHW Ch. 04</i>
	Feb 10 (R)	03 & 04	<i>Ch. 03 & 04 problem discussion during recitation</i>
	Feb 12	04	<i>SHW Ch. 03 due</i>

06	Feb 15	04	Ch. 04 problem discussion during recitation <i>Start of SHW Ch. 05</i>
	Feb 17	04	
	Feb 17 (R)	04	
	Feb 19	05	
07	Feb 22	05	<i>SHW Ch. 04 due</i> Ch. 05 problem discussion during recitation <i>SHW Ch. 05 due</i>
	Feb 24	05	
	Feb 24 (R)	05	
	Feb 26	05	
08	Mar 01	06	<i>Start of SHW Ch. 06</i> <i>OHW 02 due</i> Exam 02 (Chapter 3, 4 & 5) during recitation
	Mar 03	06	
	Mar 03 (R)	Exam 02	
	Mar 05	06	
09	Mar 08	06	<i>Start of OHW 03</i> <i>Start SHW Ch. 07</i> Ch. 6 & Ch. 7 problem discussion during recitation <i>SHW Ch. 06 due</i>
	Mar 10	07	
	Mar 10 (R)	06 & 07	
	Mar 12	07	
10	Mar 15	07	Ch. 07 problem discussion during recitation <i>Start of SHW Ch. 08</i>
	Mar 17	07	
	Mar 17 (R)	07	
	Mar 19	08	
11	Mar 22	08	<i>SHW Ch. 07 due</i> Ch. 07 and 08 problem discussion during recitation
	Mar 24	08	
	Mar 24 (R)	07 & 08	
	Mar 26	08	
12	Mar 29	08	<i>SHW Ch. 08 and OHW 03 due</i> <i>Start of SHW Ch. 9</i> Exam 03 (Chapter 6, 7 & 8) during recitation No classes
	Mar 31	09	
	Mar 31 (R)	Exam 03	
	Apr 02	No classes	
13	Apr 05	09	<i>Start of OHW 04</i> Ch. 09 problem discussion during recitation
	Apr 07	09	
	Apr 07 (R)	09	
	Apr 09	09	
14	Apr 12	10	<i>Start of SHW Ch. 10 and Ch 11</i> <i>SHW Ch. 9 due</i> Ch. 09 and 10 problem discussion during recitation
	Apr 14	10	
	Apr 14 (R)	9 & 10	
	Apr 16	11	
15	Apr 19	11	<i>OHW 04 due</i> <i>SHW Ch. 10 and Ch. 11 due</i> Review for final exam Reading day (no classes)
	Apr 21	11	
	Apr 21 (R)	Review	
	Apr 23	Reading day (no classes)	
Final week	Apr 28 8.00 am – 10.00 am		Final Examination (Ch. 01 - 11) at online (per UNT schedule)

* (R): Recitation, SHW: Sapling Homework, OHW: Other Homework

Studying Organic Chemistry

Contrary to what you may have heard, organic chemistry does not have to be a difficult course. You will learn more in it than in almost any course you will take—and what you learn will have a special relevance to life and the world around you. However, because organic chemistry can be approached in a logical and systematic way, you will find that with the right study habits, mastering organic chemistry can be a deeply satisfying experience.

1. Be prepared before you come to class -
2. Keep up with your work from day to day—never let yourself get behind.
3. Study material in small units and be sure that you understand each new section before you go on to the next.
4. Work all class review questions before the next class.
5. Work all the in-chapter and assigned problems.
6. Write when you study.
7. Learn by teaching and explaining.
8. Use molecular models when you study.

(Instructor reserves the right to amend this information, as necessary.)